USEPA AMCO Superfund Site CAG Meeting, November 8, 2010

EPA Attendees: Rose Marie Caraway
Leana Rosetti
Steve Calanog
Sophia Serda

EPA Contractor Attendees:
Kent Baugh/ITSI
Yash Nyznyk/CDM
Carolyn Moore/CDM

CAG Attendees: Brian Beveridge
Bradley Angel – GreenAction
Eric Maundu – Kijiji Grows
John Schweizer - TASC
Angie May
Hilair Chism
Scott Oliver
Clif Tse and partner (did not sign in)
Chungchi Che
Tony Diamantidis

Purpose of Meeting

- *Discuss the current structure of the CAG and review options for future CAG structure and facilitation*
- *Understand how the EPA calculates risk posed by AMCO Site and under what circumstances relocation is merited.*
- *Receive update on Lead Cleanup bench-scale testing and proposed schedule moving forward*
- *Receive update on Focused Feasibility Study and Proposed Plan, including tentative schedule for document review and public meetings and discuss Proposed Plan technical sessions intended as opportunity for public to provide input.*

Welcome & Introductions

Brian Beveridge, Community Co-Chair, and Leana Rosetti, EPA Community Involvement Coordinator (CIC) and EPA Co-Chair

- Brian and Leana presented information sources for AMCO Superfund Site:
  - AMCO website www.epa.gov/region09/AMCO
  - West Oakland Lead website: www.epaosc.org/WOaklandPb
  - AMCO Facebook page: www.facebook.com/epa.amco
- Leana indicated that handouts containing questions from the site tour with EPA Regional Administrator Jared Blumenfield are available. Leana indicated that she will take any follow-up questions and address them at a future CAG meeting.
- Additionally, Leana and Brian, and Technical Adviser (TA) John Schweizer are available by e-mail to answer questions.
- The TA indicated he will be putting his reports up on the AMCO Facebook page.
- Evaluation forms for the October 16 Open House are available at the sign-in table.

Review CAG Structure

Co-Chairs Brian and Leana reviewed CAG Structure

For more information, refer to EPA handout regarding CAG Structure at Bay Harbor Cement Kiln Dust Site, Regional Stakeholder Group (RSG) Operating Procedures.

- Brian described the concept of a Community Advisory Group (CAG) and explained how this CAG currently works.
- Brian explained that this November 8 meeting will have a different seating arrangement to put the focus on the residents and community volunteers that are consistent members of the CAG.
- Brian indicated that it's important for the CAG to maintain its focus on its advisory role.
- The CAG needs to continue to move forward and focus on having input when the ROD and Proposed Plan are released for public review.
- A handout with the operating procedures used by regional stakeholders at the Bay Harbor Cement Kiln Dust site was given out as an example of procedures that could be helpful for this group.
    - Brian asked CAG members to review the document and see if there are any procedures that the CAG should adopt.
    - Send suggestions and changes to Brian.
- Leana indicated that the facilitator (Marsha Pendergrass) will no longer be working with the CAG. From now on the co-chairs will be serving as facilitators. They will have responsibility to ensure that the meeting flows smoothly and stays on track. Leana and Brian will be keeping EPA and community on track, respectively. As a result, during discussion and comment periods, some questions may be tabled for later discussion and some questions may be posed for the CAG as a body. Some questions may be for EPA to address with a presentation at a future meeting.
- The facilitation is to ensure that regular attendees are able to gain new information and provide advice on developing issues. When an issue has already been covered or a question has already been answered at previous meetings, the co-chairs will refer to existing information sources.

Human Health Risk Assessment (HHRA) for AMCO

EPA - Sophia Serda, EPA Toxicologist, presented an overview of health risks posed by the AMCO Chemical Superfund Site, addressed cumulative impacts and sensitive individuals, and provided an update to the HHRA.

For more information, refer to the EPA HHRA handouts.

- Risk Assessment
    - Used to identify which chemicals need to be removed from soil, groundwater, and/or air in order to protect human health.
    - EPA uses Risk Assessment to prioritize site funding.
    - Results are estimates and not certainties.
    - EPA uses a target risk range as a basis for action. The target risk range is between one in a million excess cancers ($1x10^{-6}$) and 100 in a million ($1x10^{-4}$) excess cancers. EPA has discretion to take action within this target risk range.
- Cumulative Impacts as defined by the California Office of Environmental Health Hazard Assessment (OEHHA) - Exposures, impacts to public health, or environmental effects from the combined emissions and discharges in a geographic area. This includes environmental pollution from all sources, whether single or multi-media, that is routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socio-economic factors, where applicable, and to the extent data are available.
- Precautionary Approach as defined by California OEHHA - Taking anticipatory action to protect public health or the environment if a reasonable threat of serious harm exists based upon the best available science and other relevant information, even if absolute and undisputed scientific evidence is not available to assess the exact nature and extent of risk.

- Years ago EPA was asked about risk calculations for at-risk populations, populations with other environmental risks, and sensitive populations such as children and pregnant women. The EPA believes that both the dose and the timing for an exposure can create significant risk. Pre-natal periods are considered to be critical times for exposure.
- Children whose parents are exposed to benzene occupationally (levels above 3100ug/m3) are the most sensitive sub-group to benzene exposure.
- The AMCO HHRA contains a section about previous health studies that have addressed vulnerable populations. West Oakland is considered a vulnerable population. This is why EPA recommends action be taken at the lower end of the risk range – a precautionary approach.
- Handouts include pamphlets about daily toxic exposures that often are not apparent.
    - Toxics are contained in plastics and other consumer products, including phthalates , bisphenol A, and both bromated and chlorinated flame retardants.
    - VOC compounds are contained in sealants and paints and lead to human exposures.
    - Routinely used chemicals can affect indoor air quality. Typical indoor air concentrations can exceed risk screening levels.

- HHRA Summary
    - EPA wanted to focus on all chemicals – in air from all sources, all chemicals in soil,,and all chemicals in groundwater – to see patterns of data and be able to comprehensively quantify the total risk to the population. All chemicals detected were used in the risk assessment.
    - Figure shows crawlspace and ambient air and associated risks.
        - Red color – excess lifetime cancer risk from long-term exposure is present and is outside of EPA's protective risk range (slightly above 100 in a million).
        - Orange color – excess lifetime cancer risk is present from long term exposure is present, but is within EPA's protective risk range.
        - "A" signifies a sample collect from ambient air; "C" signifies a sample collected from crawlspace air.
        - The groundwater plume is also depicted.
        - The figure shows that highest excess cancer risk is located adjacent to the Former AMCO Facility and in the three homes along 3rd Street.
        - The figure shows that cancer risk and non-cancer health hazard from ambient air at Prescott Park and at the homes along 3rd St. are similar to those measured for background risks at Lewis Street.
- In order to address cumulative risk impacts, EPA:
    - Used new, more stringent lead toxicity information.
    - Used new OEHHA toxicity information.
    - Recommended action at a calculated risk of one in a million ($1x10^{-6}$) rather than 100 in a million ($1x10^{-4}$).
- Limitations of Superfund Law – why it was not appropriate to move Manuel Pimentel:
    - There is a petroleum exclusion provision in Superfund Law. The EPA is not able to take action due to risks posed solely by diesel or gasoline sources.
    - Under Superfund Law, emergency action can only be taken if there are exceedingly high levels and immediately dangerous risk from chemicals posed by the site, which would then fall under the Emergency Response authority
- Interactions of Risk Factors over lifespan determine individual health status.
    - Stress and nutritional status affect response to environmental factors.
    - No individual is exposed to a single chemical; chemical interactions are possible.
- Quantification of risks from cumulative impacts is a developing science. At the AMCO Chemical Superfund Site, EPA is trying to address this issue by assuming that risks from multiple chemicals are additive.

Community Comments

- **Question**: In the map that shows the plume and the different testing sites, the background reference site is from Lewis Street – Where can we get the numbers for here (Mandela Gateway Apartments) or further away? What is the background concentration of benzene?
    - **EPA** - When we look for a background concentration, we look to see if there are any other background data points and evaluate wind directions from upwind and downwind locations outside of the impact zone.
    - There is a Bay Area Air Quality Management District (BAAQMD) monitoring station located at 2419 Filbert Street. There several sampling events per year at this station.
- **Question**: On one of the presentation figures, the air concentrations for the park are at the same level as the background; however, there is talk about moving the playground to the other side where the air quality is supposedly better.
    - **Brian** – There's a perception in the community that the playground area of the park is more impacted. Also there is a certain amount of debate about the veracity of these measurements.
    - **Leana** – This question was answered in the e-mail/handout that was prepared following the Site Tour. There had been detections in the soil gas at the playground area, but there were never detections in the ambient air that would pose an unacceptable excess risk to human health or that were any greater than other areas in the neighborhood.
- **Question**: Due to proximity to the entrance to the port, truckers park and idle. BART also decreases air quality. Many people in the neighborhood have moved because of air quality issues.
    - **Brian** – It is illegal for trucks to park in the community, but they still come. You can tell them to go away, but others will come back.
    - **EPA** – Ms. Caraway indicated that she will notify the City of Oakland that trucks parking and idling in the community is still a problem.
- **Question**: Still unclear as to why Mr. Pimentel was not moved? At the time, EPA claimed that there wasn't significant enough risk. Also feel that historical exposures to cancer causing materials is missing from the risk quantification. How do you add this to the risk profiles you are quantifying now? All the history needs to be considered as well as the demographics of the area and the sensitivity of the population. Also, recognize that Prescott Park is not EPA's jurisdiction, but the community would appreciate EPA's help with the City [of Oakland].
- Brian – What is the 300 cases of cancer per million (30% lifelong risk of getting cancer)? Is this the baseline? What is the baseline for "natural" cancer happening in a population in a pristine environment? When you say 30% of people will develop cancer, if 25% of that is due to exposure to manmade toxins or environmental sites then the baseline is skewed.
    - **EPA** –The rate of cancer tends to be influenced by ethnic and socioeconomic factors, but based on available data, about 30% of community in the U.S. will get cancer. The causes of cancer within the community are many, including smoking, and occupational exposures. There is no way to measure a baseline human cancer rate in a pristine environment, as manmade toxins are pervasive in the environment.
    - Within Superfund, the goals are to establish the nature of the contamination, to estimate the affects to human health and the environment, and, where appropriate, to take action to mitigate the risks posed by contamination.
    - **Leana** – Ambient air in the neighborhood is between 1 and 100 million excess cancers; we can't really track what that risk comes from (i.e., from the AMCO Chemical Site or from other sources within the community). If the total risk is above the target risk range then EPA has the power to clean up the Superfund site.
    - The goal of this cleanup is to create conditions so not more than 1 in a million additional cases of cancer occur due to the contaminant conditions at this site.
- Brian – The risks are high at the site but the ambient risks levels are pretty uniform across the neighborhood and are just as high.

- Bradley Angel stated that he believes that EPA has historically understated the risks posed by the AMCO Chemical Site. Years ago EPA told the residents that it would take decades for the plume to move across the street [towards Prescott Park] and it only took a few years. It is a big issue because there are families and little kids being exposed to these concentrations.
    - **EPA** – Risks are assessed thoroughly and systematically using the data available. The West Oakland community is considered an Environmental Justice community and there are additional environmental and health factors that come into the play. These factors were taken into consideration in EPA's risk calculations and recommendations. If the excess risk posed by the Site is within the target risk range then it affects the site's ability to receive federal funding. If the risk is above the target risk range then funding is a given. Risk assessment is a tool to allow the EPA to move forward with remedial action at the Site, and in this case the Risk assessment's conclusions qualified the Site to be put on the National Priorities List and receive funding to be cleaned up. EPA is moving as fast as it can to clean up the Site.
    - **Leana** – We were able to put in the soil vapor mitigation systems due to data from the vapor investigation activities (soil gas, crawl space, and indoor air).
    - **Leana** – To answer the earlier question about relocation, the Superfund process does not allow action if risks posed by a specific site do not exceed the defined risk range. The EPA can only move people immediately during an emergency response action, where site contaminants pose an immediate health risk. Because the calculated risk was in the long-term range, there were no mechanisms for EPA to move the Pimentel family under Superfund. If the community would like to further pursue this issue, options include:
        - Elevating the issue to the legislative level and changing Superfund provisions
        - Many of the risks at that residence were due to other factors, including proximity to the freeway. These risk factors need to be addressed by zoning laws.

West Oakland Lead Update

EPA - Steve Calanog presented an update regarding the West Oakland Residential Lead Project

- The West Oakland Residential Lead Project addresses lead contamination in soil in the six neighborhood blocks adjacent to AMCO Chemical Site.
- Preliminary Lab Results of Bench Testing
    - Treatment process aims to reduce the bioavailability of lead.
    - Evaluating several treatments. Specifically, trying to determine (1) whether a soil amendment of 3% calcium phosphate or 5% calcium phosphate is more effective in reducing the bioavailability of lead, and (2) the optimum timeframe for effective treatment.
    - As part of the bench testing EPA is performing multiple analyses on treated and untreated soil.
        - X-Ray Fluorescence measures total lead.
        - TCLP (Toxicity Characteristic Leaching Procedure) measures concentrations of lead in leachate.
        - In Vitro Extraction measures bioavailability of lead after treatment.
        - Electron Microscopy is used to determine lead speciation (what type of lead is present?). This is used on treated soil to determine how much of the lead in soil is converted to a non-toxic form.
- Figure shows analytical results from soils collected at 316 Henry Street, from the front and back yards.
    - Pyromorphite is non-toxic lead
    - Adsorbed Pb is toxic lead. Results shown are percent of each lead species present when soil is treated with 0%, 3% and 5% amendments.
    - Speciation shows that treatment is reducing the toxic lead species. EPA is cautiously optimistic about the results.

- EPA is looking at both 3% and 5% treatment options due to concern over phosphorus runoff to waterways. During bench-scale testing to date, phosphorus leaching and runoff does not appear to be a concern (phosphorus seems to be remaining in the soil matrix).
- Local Contracting Opportunities
    - EPA is in the process of hiring a local project coordinator. This coordinator will hire local labor.
    - Additional small contracts include a contract to develop 3 to 5 master design themes to present to residents and a contract to conduct community relations and public messaging regarding the project. Ideally, this work would be undertaken by a resident of the neighborhood. Finally, EPA is considering a contract to document the project through video, potentially creating an informational film that would be available for use by other communities dealing with similar issues.
    - Please spread the word and have interested people contact Mr. Calanog to learn how to apply for these small contracts.

Community Comments

- **Question:** Brian- Are you going to be able to mix the soil in the field as you have in the lab?
    - **EPA** – yes
- **Question:** When you are tilling the soil, will dust be kicked up?
    - **EPA** – Dust mitigation will be considered as part of project implementation. Irrigation will be used to keep the soil moist and minimize dust. Observers will be on-site to assist in ensuring that proper measures are followed.
    - The soil will be treated and then a green cap, or clean soil layer, will be placed over the treated soil in order to minimize future exposure and dust nuisance.
- **Question:** Will it be necessary to remove soil from the yards prior to the soil tilling activities (in order not to raise the elevation of the yards)?
    - **EPA** – The soil cap will be low profile so minimal soil removal, if any, will be necessary. There are a lot of ideas about what could serve as the green cap including drought resistant plants, native species and planters.
- A community member related that they had a negative experience with the local contractor hired during the previous lead removal action. Many plants died as a result of transplantation and replacement plants were not available. The fact that the contractor is local is not the only important consideration. It is also important to consider demonstrated success and reliability.
    - **EPA** – Experiences with the previous lead cleanup has influenced the development of this new process. Additionally, Mr. Calanog indicated he will be available to respond to any concerns during implementation.
    - **Brian** – Maybe longer contracts should be issued so success can be evaluated over the course of the contract. These are important issues and should be addressed in the development of the contracts.
- **Question:** What is the timeline for implementation?
    - **EPA** – The EPA hopes to have bench-scale testing data to share in January. The hope is to start the work in February, if the community finds the data compelling. Work in each yard will take 7-10 working days.
- **Question:** Do you have a timeline for the whole project? Is it up on the website?
    - **EPA** – The timeline is contingent upon contracting and approval of the remediation process.
- **Question:** Who is accountable if the AMCO project does not move forward on the timeline that is published?
    - **Ms. Caraway** indicated that any questions regarding the schedule for the AMCO Chemical Superfund Site should go to her.

AMCO Chemical Site

Update on Focused Feasibility Study Report and the Proposed Plan

EPA

For more information, refer to EPA's handout depicting excavation areas.

- Consultants are currently preparing the Focused Feasibility Study (FFS). EPA will begin review of an internal draft on November 19th. EPA hopes to be able provide review comments during the first week of December.
- There will be a review period during January/ February; EPA cannot give a definite schedule for how long the California state regulatory agencies (DTSC) will take to review the document. EPA cannot release the documents for public comment until after the State regulatory agencies have reviewed the FFS.
- After completion of the FFS, the following documents will be prepared:
    - Proposed Plan (based on the FFS, describes the selected remedial action) –
        - There will be an open Public Comment Period for 30 days. During the Open Comment Period there will be a Public Hearing with a stenographer; Presentation of the Proposed Plan will conclude with an open questions period and then an open comment period. The Interim ROD will be signed after the public comment period and public hearing have been completed.
        - The community has requested small technical discussion groups of the FFS/Proposed Plan be conducted. EPA will try to schedule discussion groups during the next meeting.
        - EPA would like the community to note that the FFS/Proposed Plan and Interim ROD are being developed on an accelerated schedule and are assuming no delays.
        - EPA Headquarters determined that the Remedial Investigation must be finalized before finalizing the FFS/Proposed Plan, which is one reason for the pushing back of the timeline.
    - Remedial Design/Remedial Action:
        - EPA anticipates that development of related design documents and implementation of the interim remedial action will move forward quickly once the FFS/Proposed Plan and Interim ROD are finalized. The design documents for an excavation remedial action are usually straightforward.
- The contract language for U.S. Army Corps of Engineers to be involved in the permanent and temporary relocation of residents is already written. The relocation process that had been discussed will not change. Timing of relocations will depend on the signing date for the Interim ROD. The decision to relocate will not become final until the Interim ROD is signed. Input from community members or the State regulatory agencies can influence whether relocation is implemented as part of the planned Interim Remedial Action.
- EPA indicated that the schedule for these activities will be updated at the December meeting.

Community Comments

- A community member expressed frustration that the schedule for work at the AMCO Site has changed so many times. The community member has elderly family members and a new baby and not knowing the schedule and the timeframe makes planning difficult. The community member expressed that it's very frustrating when the goals or the deadlines are not met.
    - **EPA** – The timeline for the work becomes very definite after the Proposed Plan is finalized. The current schedule is an aggressive one that the EPA hopes to follow.
    - **Leana** indicated that she is available by phone and email at anytime to answer specific homeowner's questions and to provide updates to the timeline.
- Brian – What is causing this delay? The schedule for the Open Comment seems to have been moved from December 2010 to March 2011.
    - **EPA** – Additional requirements for documentation were identified that were not anticipated, including the need to finalize the Remedial Investigation Report.
- Brian – What is the problem with the agency?

    - **EPA** – People are not trying to block the project moving forward, but in order to get this amount of funding it is necessary to ensure that certain reports are finalized as a way of documenting the actions taken at the Site.
- Brian – Is there the possibility that the schedule will slip again in the Spring?
    - **EPA** – One of the remaining issues is working with the State regulatory agency (Department of Toxic Substances Control). EPA is currently in discussions with DTSC.

Next Meeting

- AMCO Superfund Site CAG Meeting: December 13, 6:30 – 8:30 PM at the Mandela Gateway Apartments Community Room located at 1350 7th Street, Oakland.